# **WEST Search History**

Hide Items Restore Clear Cancel

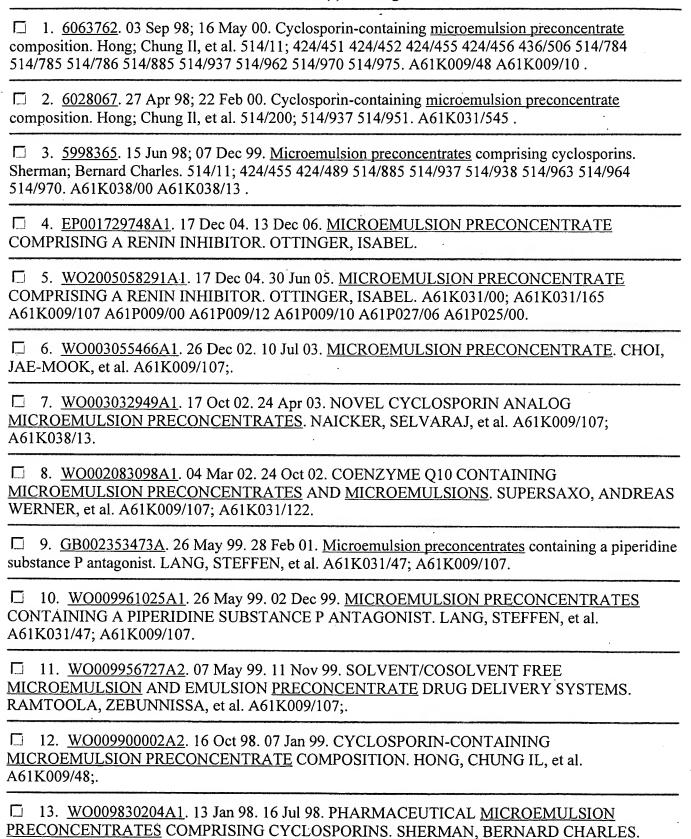
DATE: Wednesday, March 21, 2007

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	DB=PG	GPB; $PLUR = YES$ ; $OP = OR$	
	· L1	ottinger.in. and renin	0
	L2	ottinger.in. and renin\$	0
	L3	ottinger.in.	19
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	L5	microemulsion.ti.	99
	L6	L5 and renin.ti.	0
	L7	L5 and preconcentrate	3
DB=USPT, USOC, EPAB, JPAB, DWPI; PLUR=YES; OP=OR			
	L8	microemulsion.ti. and preconcentrate.ti.	26

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### Search Results - Record(s) 1 through 26 of 26 returned.



A61K009/107; A61K038/13.
☐ 14. <u>GB002315216A</u> . 23 May 94. 28 Jan 98. <u>Microemulsion preconcentrates</u> comprising FK 506. FRICKER, GERD, et al. A61K009/107;.
☐ 15. WO009722358A1. 03 Dec 96. 26 Jun 97. MICROEMULSION PRECONCENTRATES COMPRISING CYCLOSPORINS. SHERMAN, BERNARD CHARLES. A61K038/13; A61K009/107.
16. WO2003055466A. Microemulsion preconcentrate useful in an oral pharmaceutical preparation comprises active component, oil, surfactant and hydrophilic solvent. BAEK, M, et al. A61K009/08 A61K009/10 A61K009/107 A61K009/48 A61K031/195 A61K031/56 A61K031/704 A61K031/7072 A61K038/00 A61K038/12 A61K038/13 A61K047/14 A61K047/44.
17. <u>EP 1249231A</u> . New <u>microemulsion preconcentrate</u> useful for the treatment of pain, rheumatism and arthritis comprises non-steroidal antiinflammatory drug, triglyceride and a surface active agent. SUPERSAXO, A W, et al. A61K009/107 A61K009/48.
18. EP 1249230A. Microemulsion preconcentrate, useful for treatment of, e.g. cardiovascular disorders, muscular dystrophy and male infertility, comprises triglyceride, surface active component containing a surfactant and a ubiquinone. SUPERSAXO, A W, et al. A61K009/107 A61K031/122 A61K047/06 A61P009/00 C11D017/00.
19. WO 200128519A. Microemulsion preconcentrate and microemulsion comprises triglyceride with omega-9 and/or omega-6 fatty acid stabilized with polyoxyethylene type tenside surfactant. SUPERSAXO, A W, et al. A61K009/107 A61K009/48.
□ 20. WO 200128518A. Pharmaceutical microemulsion preconcentrate and microemulsion comprises triglyceride, omega-9 and/or omega-6 fatty acid, cyclosporin compound and polyoxyethylene type tenside stabilizer. SUPERSAXO, A W, et al. A61K009/107 A61K009/48 A61K038/13.
21. WO 200128520A. Microemulsion preconcentrate containing triglyceride, fatty acid and surfactant, spontaneously forming emulsion in water, useful as carrier for water-insoluble active agents, e.g. drugs. SUPERSAXO, W, et al. A61K007/00 A61K009/107 A61K009/48 A61K038/12 A61K038/13 A61K047/12 A61K047/14 A61K047/34.
22. WO 9956727A. Self-emulsifying preconcentrate pharmaceutical composition forming oil-in-water microemulsion or emulsion upon dilution with aqueous solution. CLARKE, N M, et al. A61K009/107 A61K009/48.
23. WO 9929335A. Oral cyclosporin microemulsion preconcentrates used to prevent allograft rejection following transplantation of tissues or organs. CHOI, N H, et al. A61K038/13.
24. <u>US 5674549A</u> . Emulsion <u>preconcentrate</u> containing hydrolysed fat and aroma and/or flavour - useful as <u>microemulsion</u> formulation for frozen or chilled foods which spontaneously forms <u>microemulsion</u> upon heating which rapidly releases functional aromatising substance. CHMIEL, O, et al. A23D007/00.
25. <u>US 5998365A</u> . Pharmaceutical composition in form of <u>microemulsion preconcentrate</u> - comprises cyclosporin dissolved in solvent system which also comprises hydrophobic component, hydrophilic component and surfactant. SHERMAN, B C. A61K009/107 A61K038/00 A61K038/13

26. <u>EP 760237A</u>. <u>Preconcentrate</u> compsn. for admin. of water-insoluble drugs, esp. cyclosporin comprise vegetable oil glyceride cpds., lecithin and another surfactant, and is mixed with hydrophilic phase to give stable oil-in-water <u>microemulsion</u>. HAMIED, Y K, et al. A61K000/00 A61K009/107 A61K009/113 A61K037/00 A61K038/13 A61K047/44.

### **Search Results** - Record(s) 1 through 3 of 3 returned.

- 1. <u>20050118254</u>. 25 Jun 04. 02 Jun 05. <u>Microemulsion preconcentrate</u>. Choi, Jae Mook, et al. 424/451; 514/11 514/171 514/254.07 514/291 514/34 514/355 514/411 514/449 514/49 514/561 514/571 A61K038/13 A61K031/7072 A61K031/704 A61K031/56 A61K031/195.
- 2. <u>20040152612</u>. 07 Jan 04. 05 Aug 04. Coenzyme q10 containing <u>microemulsion preconcentrates</u> and <u>microemulsions</u>. Supersaxo, Andreas, et al. 510/407; 510/421 C11D017/00.
- 3. 20020146375. 28 Jun 01. 10 Oct 02. Cosmetic or pharmaceutical lecithin-containing gels or low viscosity lecithin-containing O/W microemulsions. Schreiber, Jorg, et al. 424/59; 424/70.23 A61K007/42 A61K007/075 A61K007/08.

32

L8

(((DELTA-AMINO-GAMMA-HYDROXY-OMEGA-A-RYL-ALKANOIC)! ) or ((DELTA-AMINO-GAMMA-HYDROXY-OMEGA-ARYLALKANOIC | DELTA-AMINO-GAMMA-HYDROXY-OMEGA-ARYL-ALKANOIC | DELTA-AMINO-GAMMA-HYDROXY-OMEGA-ARYL-ALKA-NOIC | DELTA-AMINO-GAMMA-HYDROXY-OMEGA-ARYL-ALKANECARBOXAMIDES | DELTA-AMINO-GAMMA-HYDROXY-OMEGA-ARYL-ALKANECARBOX-AMIDES | DELTA-AMINO-GAMMA-HYDROXY-OMEGA-ARYL-ALKAN-ECARBOXAMIDES | DELTA-AMINO-GAMMA-HYDROXY-OMEGA-ARYL-ALKAN-ECARBOX-AMIDES | DELTA-AMINO-GAMMA-HYDROXY-ALPHA-ARYL-ALKAN-ECARBOXAMIDES | DELTA-AMINO-GAMMA-HYDROXY-ALPHA-ARYL-ALKANECARBOXAMIDES | DELTA-AMINO-GAMMAHYDROXY-OMEGA-ARYLALKANECARBOXAMIDES)! ))

DB=TDBD,DWPI,JPAB,EPAB,USOC,USPT,PGPB; PLUR=YES; OP=OR

<u>L9</u>	(W/O)!	14928 <u>L9</u>
<u>L10</u>	(W/O)!	14928 <u>L10</u>
<u>Ľ11</u>	(O/W   O/WATER   O/WATER- SENSITIVE)!	9514 <u>L11</u>
<u>L12</u>	(MICELLAR   MICELLAES   MICELLAE-CONTAINING   MICELLARAGGREGATES   MICELLARDISPERSION   MICELLARDISPERSIONS   MICELLARIZARION   MICELLARIZATION   MICELLARIZED   MICELLARLY   MICELLARSOLUTIONS   MICELLARSURFACTANT   MICELLARPOLYMER   MICELLANOUS   "MICELLANOUS   "MICELLANOIC   "MICELLANES   MICELLANEOUS   MICELLANES   MICELLANEOUS   MICELLANES   MICELLANEOUS	8538 <u>L12</u>
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<u>L14</u>	(MICELLARY/VESICULARY   MICELLAR-BASED   MICELLAR- BRIDGING   MICELLARY   MICELLARSURFACTANT	54 <u>L14</u>

	MICELLARSOLUTIONS	
	MICELLARPOLYMER	
	MICELLARLY)!	
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	"NANOPARTICIES[.SUP.16]"	
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<u>L15</u>	NANOPARTICLE	25233 <u>L15</u>
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<u>L16</u>	NANOPARTICLESFIBER	10 <u>L16</u>
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<u>L17</u>	NANOPARTICLES2003	34 <u>L17</u>
	NANOPARTICLES-A	
	NANOPARTICLES-ALL	
	NANOPARTICLES-ALSO	
	NANOPARTICLES-AND)!	
·	(NANOPARTICLES-BASED	•
	NANOPARTICLES-BIS	
<u>L18</u>	NANOPARTICLES-BOTH	20 <u>L18</u>
	NANOPARTICLES-BOUND	
	NANOPARTICLES-BUILDING)!	•
	9	•
•	(NANOPARTICLES-	
	CHARACTERIZATION	

<u>L19</u>	NANOPARTICLES-COMPOSED   NANOPARTICLES-COMPRISING   NANOPARTICLES- CONCENTRATED   NANOPARTICLES-CONJUGATED   NANOPARTICLES- CONTAINING   NANOPARTICLES-CONTAININ- G)!	30 <u>L19</u>
<u>L20</u>	(NANOPARTICLES-DISPERSED   NANOPARTICLES-DISPERSION   NANOPARTICLES-ENTRAPPING   NANOPARTICLES-FOR   NANOPARTICLES-FORMING   NANOPARTICLES-FROM)!	14 <u>L20</u>
<u>L21</u>	(NANOPARTICLES-HAVE   NANOPARTICLES-INCLUDING   NANOPARTICLES-INVENTIVE   NANOPARTICLES- INDEPENDENT)!	6 <u>L21</u>
<u>L22</u>	(NANOPARTICLES-MARKED   NANOPARTICLES-LIKE   NANOPARTICLES-LIGAND   NANOPARTICLES-LABELED   NANOPARTICLES-KNOWN   NANOPARTICLES-JUST   NANOPARTICLES-IS)!	12 <u>L22</u>
<u>L23</u>	(NANOPARTICLES-MODIFIED   NANOPARTICLES- NANOCLUSTERS   NANOPARTICLES-NANOTUBE   NANOPARTICLES-NOVEL)!	127 <u>L23</u>
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<u>L29</u>	(NANO-PARTICLES/ULTRA-FINE-PARTICLES   NANO-PARTICLES/ULTRA-FINE-PARTICLES/ULTRA-FINE-PARTICLES/MICRO-SPHERES   NANO-PARTICLES/RODS   NANO-PARTICLES/SILICA   NANO-PARTICLES/SPHERES   NANO-PARTICLES/TRANSPARENT   NANO-PARTICLES/TUBES)!	12 <u>L29</u>
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<u>L32</u>	(NANO-PARTICLE/MICRO- PARTICLE   NANO- PARTICLE/MOLECULAR   NANO- PARTICLE/MICRO- PARTICLE/SUBSTRATE   NANO- PARTICLE/NANO-STRUCTURED   NANO-PARTICLE/POLYMER   NANO-PARTICLE/ROD   NANO- PARTICLE/ORGANIC)!	6 <u>L32</u>
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<u>L39</u>	(REN	IIN   RENINAND)!	9392 <u>L39</u>
<u>L40</u>	(REN	IINANTAGONISTS)!	1 <u>L40</u>
<u>L41</u>	ÎNHI   REN INHI	IIN-INHIBING   RENIN- BITORS   RENIN-INHIBITING VIN-INHIBITION   RENIN- BITOR   RENIN-INHIBITORS VIN-INHIBITORY)!	546 <u>L41</u>
<u>L42</u>	ÎNHI   REN INHI	IIN-INHIBING   RENIN- BITORS   RENIN-INHIBITING VIN-INHIBITION   RENIN- BITOR   RENIN-INHIBITORS VIN-INHIBITORY)!	, 546 <u>L42</u>
<u>L43</u>	(5654	1445   5654445A)!	3 <u>L43</u>
DB = PGPB, $USPT$ , $USOC$ , $EPAB$ , $JPAB$ , $DWPI$ , $TDBD$ ; $PLUR = YES$ ; $OP = OR$			
<u>L44</u>	·	110) and 111	4826 <u>L44</u>
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<u>L51</u>	microemuls\$	20911 <u>L51</u>
<u>L52</u>	L51 and (L41 OR L42 OR L40 OR L34 OR L35 OR L8)	14 <u>L52</u>
<u>L53</u>	5,633,226	24 <u>L53</u>
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<u>L56</u>	424/9.321/ccls	0 <u>L56</u>
<u>L57</u>	424/9.321.ccls.	139 <u>L57</u>
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<u>L60</u>	424/401.ccls.	6996 <u>L60</u>
<u>L61</u>	424/450.ccls.	3729 <u>L61</u>
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<u>L70</u>	L69 and (L8 OR L35 OR L34 OR L40 OR L41 OR L42)	0 <u>L70</u>
<u>L71</u>	captex\$ or CAPTEX\$	952 <u>L71</u>
	L71 AND (aliskiren or ankiren or	
<u>L72</u>	enalkiren or remikiren or L41 OR L42 OR L40 OR L34 OR L35 OR L8)	. 1 <u>L72</u>

# END OF SEARCH HISTORY



## (19) United States

# (12) Patent Application Publication (10) Pub. No.: US 2004/0052824 A1

Abou Chacra-Vernet et al.

Mar. 18, 2004 (43) Pub. Date:

MICELLAR COLLOIDAL PHARMACEUTICAL COMPOSITION CONTAINING A LIPOPHILIC ACTIVE **PRINCIPLE** 

Inventors: Marie-Line Abou Chacra-Vernet, Nice

(FR); Claude Laruelle, Villeneuve-Loubet (FR); Dominique

Toselli, Nicc (FR)

Correspondence Address: Thomas W Tolpin Welsh & Katz 22nd Floor 120 South Riverside Plaza Chicago, IL 60606 (US)

Appl. No.:

10/465,923

PCT Filed:

Dec. 27, 2001

PCT No.:

PCT/FR01/04212

(30)Foreign Application Priority Data

**Publication Classification** 

A61K 35/78; A61K 9/00

(52) U.S. Cl. ...... 424/400; 424/725; 514/171;

(57)**ABSTRACT** 

The invention concerns novel pharmaceutical compositions capable of comprising micelles containing at least a very lipophilic principle, enabling to enhance bioavailability of active principles insoluble in aqueous solvents called MIDDS® (Micellar Improved Drug Delivery Solutions).



### (19) United States

### (12) Patent Application Publication (10) Pub. No.: US 2007/0037821 A1 Garvev et al.

Feb. 15, 2007 (43) Pub. Date:

### (54) NITROSATED GLUTAMIC ACID COMPOUNDS, COMPOSITIONS AND METHODS OF USE

### Inventors: David S. Garvey, Dover, MA (US); Richard A. Earl, Westfield, MA (US); Malko Ezawa, Acton, MA (US); Xinqin Fang, Lexington, MA (US); Ricky D. Gaston, Malden, MA (US); Subhash P. Khanapure, Clinton, MA (US); Chia-En Lin, Concord, MA (US); Ramani R. Ranatunga, Lexington, MA (US); Cheri A.

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Stevenson, Haverhill, MA (US); Shlow-Jyl Wey, Billerica, MA (US)

(73) Assignee: NITROMED, INC., LEXINGTON, MA (US)

10/573,030 (21) Appl. No.:

(22) PCT Filed: Sep. 27, 2004

(86) PCT No.: PCT/US04/31372

§ 371(c)(1),

(2), (4) Date: Mar. 22, 2006

#### Related U.S. Application Data

(60) Provisional application No. 60/505,921, filed on Sep. 26, 2003.

#### **Publication Classification**

(51) Int. Cl. A61K 31/495 (2007.01)C07D 241/04 (2006.01)A61K 31/21 (2006.01)C07C 203/02 (2007.01)

U.S. Cl. ..... 514/252.12; 514/509; 544/399; 558/482; 558/483

#### **ABSTRACT** (57)

The invention describes novel nitrosated glutamic acid compounds and pharmaceutically acceptable salts thereof, and novel compositions comprising at least one nitrosated glutamic acid compound, and, optionally, at least one nitric oxide donor and/or at least one therapeutic agent. The invention also provides novel kits comprising at least one nitrosated glutamic acid compound, and, and, optionally, at least one nitric oxide donor compound and/or at least one therapeutic agent. The invention also provides methods for (a) treating cardiovascular diseases; (b) treating renovascular diseases; (c) treating diabetes; (d) treating diseases resulting from oxidative stress; (e) treating endothelial dysfunctions; (f) treating diseases caused by endothelial dysfunctions; (g) treating cirrhosis; (h) treating pre-eclampsia; (j) treating osteoporosis; (k) treating nephropathy; (l) treating diseases resulting from elevated levels of gammaglutamyl transpeptidase and (m) the targeted delivery of compounds and nitric oxide to organs, cells or tissues containing the enzyme gamma-glutamyl transpeptidase.

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L50: Entry 16 of 16

File: USPT

Dec 5, 2000

DOCUMENT-IDENTIFIER: US 6156731 A

TITLE: Polypeptide composition for oral administration

### Brief Summary Text (7):

E. German Patent Application No. DD 252 539 A published Dec. 23, 1987, Derwent Abstract 88-133631/20, discloses oral administration of active peptides such as insulin, Substance P, GnRH or its analogs, atrial natriuretic peptide, a synthetic thymus peptide, an ACE- or renin-inhibiting peptide or a neuropeptide in the form of controlled-release compositions comprising the active peptide immobilized on a carrier, a gastrointestinal absorption promoter, and a protease inhibitor. The absorption promoter is a protein/fatty acid condensate and the protease inhibitor is epsilon-aminocaproic acid or derivative thereof or aprotinin.

### Brief Summary Text (12):

H. Okada et al., J. Pharm. Sci., 71(12), 1367 (1982), evaluate the absorption of a potent luteinizing hormone-releasing hormone analog, leuprolide, through different routes such as, for example, vaginal, rectal, nasal, and oral administration, in rats. For oral administration, a mixed micellar solution with monoolein, sodium taurocholate, and sodium glycocholate was prepared. Vaginal administration showed the greatest potency among nonparenteral routes followed successively by rectal, nasal and oral administration.

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### DOCUMENT-IDENTIFIER: US 20040052824 A1

TITLE: Micellar colloidal pharmaceutical composition containing a lipophilic active principle

### Abstract Paragraph:

The invention concerns novel pharmaceutical compositions capable of comprising micelles containing at least a very lipophilic principle, enabling to enhance bioavailability of active principles insoluble in aqueous solvents called MIDDS.RTM. (Micellar Improved Drug Delivery Solutions).

### Summary of Invention Paragraph:

[0001] The present invention relates to novel micelle-forming pharmaceutical compositions containing at least one lipophilic active principle, which make it possible to increase the bioavailability of active principles insoluble in aqueous solvents, designated by the term MIDDS.RTM. (Micellar Improved Drug Delivery Solution).

### Summary of Invention Paragraph:

[0019] Now, maintaining a lipophilic AP in <u>micellar</u> solution allowing its intestinal absorption is the key to success in preparing an effective lipid formulation.

### Summary of Invention Paragraph:

[0020] Furthermore, the best SEDDSs, i.e. those which solubilize a large quantity of AP and which form very fine micellar dispersions, are generally the most hydrophilic. Now, it is for these hydrophilic SEDDSs (containing a hydrophilic S and CoS having high HLB values, in general greater than 12) that the risks of recrystallization of the AP in vivo are the greatest (Pouton, Bulletin Technique Gattefoss, 1999, 92, 41-49) and consequently the suprabioavailability of the AP is not necessarily achieved.

### Summary of Invention Paragraph:

[0033] The inventors set themselves the objective of providing a self-emulsifying pharmaceutical composition intended for oral administration, capable of forming a <u>micellar</u> solution or a microemulsion upon contact with digestive fluids, thus allowing the formulation of very lipophilic, or even extremely lipophilic, active principles while improving their bioavailability, said composition being stable in the liquid state and in the form of a microemulsion and leads to a very fine and homogeneous <u>micellar</u> dispersion.

### Summary of Invention Paragraph:

[0046] The inventors have indeed demonstrated that this composition allows the dissolution of very lipophilic APs and leads, in the presence of a hydrophilic phase, to formulations forming fine, stable and homogeneous micellar colloidal dispersions, thus making it possible to improve the bioavailability of these APs in the gastrointestinal tract.

### Summary of Invention Paragraph:

[0048] Depending on the excipients used in their formulation, there may be liquid lipid solutions or solid (semisolid, pasty) solutions at room temperature. The pharmaceutical compositions in accordance with the present invention form in all cases a microemuision or a colloidal solution, of the <u>micellar</u> type, upon contact with an aqueous phase.

### Summary of Invention Paragraph:

[0063] Among the cardiovascular system drugs, there may be mentioned in particular antagonists of angiotensin II (sartans) such as valsartan, losartan, irbesartan, candesartan, tasosartan, telmisartan (log P=4.8); .alpha.- and .beta.-blockers such as carvediol, celiprolol (log P=2.07); calcium inhibitors (dihydropyridines) such as verapamil (log P=3.8), diltiazem (log P=2.7), nifedipine (log P=2.75) and

nitrendipine (log P=3.7). It is also possible to mention other compounds, antihypertensives, such as renin-inhibiting peptides, oxazolidinone derivatives or glycol peptides substituted with amino residues and/or azole- or thiazole-containing heterocyclic rings (log P of between 2 and 4).

**Detail Description Paragraph:** 

[0113] On the other hand, the composition F2 not forming part of the invention, because it contains a large quantity of lipophilic phase (75%) and having a high HLB (HLB=14), leads to a semisolid formulation at room temperature, which is unstable and leads, in the presence of a hydrophilic phase, to a nonhomogeneous micellar solution in the form of microdroplets, composed of two different populations of micelles in terms of size: on average 112 nm (33%) and 900 nm (67%).

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